

会议简介

为促进海岸水动力模拟技术的发展，增进 FUNWAVE-TVD 用户之间的学术交流，河海大学将于 2019 年 10 月 18 至 10 月 20 日举办第三届 FUNWAVE-TVD 海岸水动力模拟研讨会。FUNWAVE-TVD 研讨会创办于 2017 年，前两届由美国特拉华大学举办。本次研讨会为第三届，是 FUNWAVE-TVD 研讨会首次在美国本土以外举办。研讨会邀请了特拉华大学、罗德岛大学、自然资源部第三海洋研究所、江苏科技大学、河海大学等多所院校及科研单位做 10 场学术报告。会议包括学术报告和 FUNWAVE-TVD 教学两部分，主题包括波浪传播变形、海岸水动力、港湾共振、海啸和多尺度淹水过程模拟。

河海大学简介

河海大学，始于 1915 年河海工程专门学校，是一所以水利为特色、工科为主、多学科协调发展的教育部直属重点大学，是国家首批授权授予学士、硕士和博士学位，实施国家“211 工程”重点建设、国家优势学科创新平台建设以及设立研究生院的高校，拥有水文水资源与水利工程科学国家重点实验室和水资源高效利用与工程安全国家工程研究中心。河海大学“水利工程”、“环境科学与工程”学科入选双一流学科建设。

主办单位

海岸灾害及防护教育部重点实验室（河海大学）
河海大学水文水资源与水利工程科学国家重点实验室
港口海岸与近海工程学院

会议主席：郑金海教授；史峰岩教授

会议秘书：时健博士；王岗副教授

联系方式：

funwave2019@163.com

会议地点：

河海大学科学会堂 102

会议日程

日期	时间	学术日程
10-18	8:00-9:30	报到
	9:30-9:45	合影
	第一部分，主持人：张继生	
	9:45-9:50	郑金海：致辞欢迎
	9:50-10:00	陈红胜：介绍河海大学
	10:00-10:30	James T. Kirby: Boussinesq 理论与 FUNWAVE 模型
	10:30-11:00	茶歇
	11:00-11:30	史峰岩：FUNWAVE-TVD 模型的发展
	14:00-15:30	培训课程 1
	15:30-16:00	茶歇
10-19	第二部分，主持人：陶爱峰	
	9:00-9:30	Stephan Grilli: FUNWAVE 在海啸模拟中的应用：方法研究
	9:30-10:00	Stephan Grilli: FUNWAVE 在海啸模拟中的应用：案例分析
	10:00-10:30	茶歇
	10:30-11:00	Young-Kwang Choi: 多重嵌套网格在 FUNWAVE-TVD 的应用
	11:00-11:30	王岗：海脊地形引起波浪俘获的理论分析和数值模拟研究
	14:00-15:30	培训课程 3
	15:30-16:00	茶歇
	16:00-17:00	培训课程 4
	10-20	第三部分，主持人：王岗
9:00-9:30		James T. Kirby: FUNWAVE 模型中岸滩演变的方法
9:30-10:00		朱君：台风“天鸽”影响下的珠海海滩侵蚀模拟研究
10:00-10:30		茶歇
10:30-11:00		Annette Grilli: FUNWAVE 评估沿海地区的极端风暴风险及美国罗德岛州的案例研究
11:00-11:30		高俊亮：FUNWAVE 模型在港口振荡研究中的应用
14:00-15:30		培训课程 5
15:30-16:00		茶歇
16:00-17:00		培训课程 6

特邀专家和组委会



郑金海教授，河海大学
主要研究方向：
河口海岸动力学；港口航道与海岸工程；河口治理与海岸保护
Email: jhzheng@hhu.edu.cn



张继生教授，河海大学
主要研究方向：
波浪-海床-结构相互作用；海洋可再生能源；海岸工程
Email: jszhang@hhu.edu.cn



张弛教授，河海大学
主要研究方向：
海岸泥沙运动与地貌形态演变
Email: zhangchi@hhu.edu.cn



王岗副教授，河海大学
主要研究方向：
海岸/海洋灾害致灾机理与模拟方法及减灾措施
Email: gangwang@hhu.edu.cn



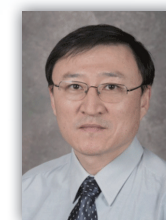
时健博士，河海大学
主要研究方向：
波浪非静压数值模拟；CFD 数值模拟；河口盐淡水混合过程
Email: jianshi@hhu.edu.cn



高俊亮副教授，江苏科技大学
主要研究方向：
港湾共振；珊瑚礁水动力学；波浪与结构物相互作用；Boussinesq 模型；计算流体力学（CFD）
Email: gaojunliang880917@163.com



James T. Kirby 教授，特拉华大学
主要研究方向：
海岸开源水动力模型开发；数值模拟；海岸水动力过程
Email: kirby@udel.edu



史峰岩教授，特拉华大学
主要研究方向：
数值模拟；海岸水动力过程；海岸水动力及泥沙输移；海啸
Email: fyshi@udel.edu



Stephan Grilli 教授，罗德岛大学
主要研究方向：
海岸波浪与水动力学；海岸波浪传播变形模拟；数值模拟；有限元和边界元法
Email: grilli@uri.edu



Annette Grilli 教授，罗德岛大学
主要研究方向：
海洋可再生能源和海岸灾害评估
Email: annette_grilli@uri.edu



Young-Kwang Choi 博士，韩国金泉市 KEPCO 工程建设公司
主要研究方向：
有限元和有限体积法在三阶波动方程中的应用
Email: ykchoi.math@gmail.com



朱君博士，自然资源部第三海洋研究所
主要研究方向：
海岸动力地貌；数值模拟；海滩修复
Email: junzhu@tio.org.cn

FUNWAVE-TVD Workshop on Coastal Hydrodynamic Simulation



2019

October 18-20, 2019
Hohai University | Nanjing, China



Workshop Introduction

In order to promote the development of coastal hydrodynamic simulation and enhance academic exchanges among users of FUNWAVE-TVD, Hohai University will hold the third FUNWAVE-TVD workshop on coastal hydrodynamic simulation from October 18 to October 20, 2019. The FUNWAVE-TVD workshop was founded in 2017 and the first two workshop were held by the University of Delaware. This workshop is the third one, which is the first time to be held outside the United States. This workshop invited 10 talks from a variety of universities and institutions, namely, University of Delaware, University of Rhode Island, the Third Institute of Oceanography, the Ministry of Natural Resources, Jiangsu University of Science and Technology and Hohai University. The workshop includes academic presentations and hands-on training sessions using the fully nonlinear Boussinesq model FUNWAVE-TVD. It covers general topics, such as modeling of nearshore surface wave transformation, harbor resonance, and tsunami propagation and inundation from ocean basin- to nearshore-scales.

Hohai University

Hohai University, a school that can trace its history back to the Hohai Civil Engineering School established in 1915, has now developed into a key state directly administrated by China's Ministry of Education. With an emphasis on the discipline on hydraulic engineering and water resources, an applied focus on Engineering subjects as well as a coordinated development of multiple disciplines, Hohai University is recognized as one of the first institutions of higher education approved by the Chinese government to confer Bachelors, Masters and PH.D degree in China. Hohai University is the beneficiary of the prestigious "211 Project" as well as the "State Advantageous Discipline Innovation Platform Project". Hohai University also has two state-level research institutions, namely the "State Key Laboratory of Hydrology-Water Resources and Hydraulic Engineering" as well as the "State Research Center of Efficient Utilization of Water Resources and Engineering Safety". The disciplines of "Hydraulic Engineering" and "Environmental Science and Engineering" at Hohai University are in the list of the "Double First-Rate" Disciplines.

Host

Key Laboratory of Coastal Disaster and Defence (Hohai University), Chinese Ministry of Education
The State Key Laboratory of Hydrology, Water Resources and Hydraulic Engineering
College of Harbour Coastal and Offshore Engineering

Organizing Committee

Chair: Prof. Jinhai Zheng; Prof. Fengyan Shi
Secretariats: Dr. Jian Shi; A/Prof. Gang Wang

Contact Information:

funwave2019@163.com

Venue:

102, Science Hall, Hohai University

Funwave Workshop 2019 Program

Date	Time	Program
10-18	8:00-9:30	Registration
	9:30-9:45	Group Picture
	Lecture Session 1, Chair: Jisheng Zhang	
	9:45-9:50	Jinhai Zheng: Welcome Speech
	9:50-10:00	Hongsheng Chen: Introduction of Hohai University
	10:00-10:30	James T. Kirby: Boussinesq Model Theory and FUNWAVE
	10:30-11:00	Tea Break
	11:00-11:30	Fengyan Shi: Development of FUNWAVE-TVD
	14:00-15:30	Training Session 1
	15:30-16:00	Tea Break
10-19	16:00-17:00	Training Session 2
	Lecture Session 2, Chair: Aifeng Tao	
	9:00-9:30	Stephan Grilli: Tsunami Applications of FUNWAVE: Methodology
	9:30-10:00	Setphan Grilli: Tsunami Applications of FUNWAVE: Case Studies
	10:00-10:30	Tea Break
	10:30-11:00	Young-Kwang Choi: Multi-grid Nesting Interface for FUNWAVE-TVD
	11:00-11:30	Gang Wang: Analytical and Numerical Investigation of Trapped Ocean Waves along a Submerged Ridge
	14:00-15:30	Training Session 3
	15:30-16:00	Tea Break
	16:00-17:00	Training Session 4
10-20	Lecture Session 3, Chair: Gang Wang	
	9:00-9:30	James T. Kirby: Approaches to Morphology Modeling in FUNWAVE
	9:30-10:00	Jun Zhu: FUNWAVE Modeling Beach Erosion during Typhoon Hato in Zhuhai, China
	10:00-10:30	Tea Break
	10:30-11:00	Annette Grilli: Assessing Extreme Storms Risk on Coastal Communities Using FUNWAVE. A Case Study in Rhode Island, USA
	11:00-11:30	Junliang Gao: Applications of the FUNWAVE Model to the Investigations of Harbor Oscillations
	14:00-15:30	Training Session 5
	15:30-16:00	Tea Break
	16:00-17:00	Training Session 6

Invited Experts & Committee



Prof. Jinhai Zheng, Hohai University
Major research interests: Estuarine and Coastal Processes; Harbor and Waterway Engineering; Coastal Engineering and Resilience
Email: jhzheng@hhu.edu.cn



Prof. Jisheng Zhang, Hohai University
Major research interests: Wave-Seabed-Structure Interaction; Offshore Renewable Energy Engineering; Coastal Engineering
E-mail: jszhang@hhu.edu.cn



Prof. Chi Zhang, Hohai University
Major research interests: Nearshore Hydrodynamics and Morphodynamics
Email: zhangchi@hhu.edu.cn



A/Prof. Gang Wang, Hohai University
Major research interests: Ocean Wave Transformation and Model Simulation
Email: gangwang@hhu.edu.cn



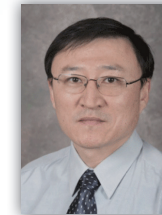
Dr. Jian Shi, Hohai University
Major research interests: Nonhydrostatic Modeling of Waves; CFD Modeling; Saltwater-Freshwater Mixing
Email: jianshi@hhu.edu.cn



A/Prof. Junliang Gao, Jiangsu University of Science and Technology
Major research interests: Harbor Resonance; Coral Reef Hydrodynamics; Wave-Structure Interaction; Boussinesq Model; Computational Fluid Dynamics(CFD)
Email: gaojunliang880917@163.com



Prof. James T. Kirby, University of Delaware
Major research interests: Development of Open Source Models for Nearshore Processes; Numerical Simulation; Coastal Processes
Email: kirby@udel.edu



Prof. Fengyan Shi, University of Delaware
Major research interests: Numerical Modeling; Nearshore Processes; Coastal Ocean Hydrodynamics and Sediment Transport; Tsunamis
Email: fyshi@udel.edu



Prof. Stephan Grilli, University of Rhode Island
Major research interests: Coastal Engineering Water Waves and Ocean Dynamics; Modeling of Wave Transformations in Coastal Areas; Numerical Modeling: Finite and Boundary Element Method
Email: grilli@uri.edu



Prof. Annette Grilli, University of Rhode Island
Major research interests: Ocean Renewable Energy Assessment and Coastal Hazard Assessment
Email: annette_grilli@uri.edu



Dr. Young-Kwang Choi, Civil & Architectural Engineering Department KEPCO Engineering & Construction Company, Gimcheon-si, Republic of Korea
Major research interests: Application of Finite Element Method and Development of Finite Volume Model to the Wave Equation Containing Third Order Spatial Derivative Term
Email: ykchoi.math@gmail.com



Dr. Jun Zhu, Third Institute of Oceanography, MNR
Major research interests: Coastal Morphodynamical; Numerical Simulation; Beach Nourishment
Email: junzhu@tio.org.cn

FUNWAVE-TVD

海岸水动力模拟研讨会



2019年10月18日—10月20日
河海大学 | 中国南京

